model resources use. A reliable clinical and primary cost-effectiveness study is warranted to take into account Canadian publicly-funded health care system.

PND12

COST-EFFECTIVENESS ASSESSMENT OF ANTIEPILEPTIC DRUGS AS ADJUVANT TREATMENTS FOR THE MANAGEMENT OF REFRACTORY PARTIAL SEIZURES IN ADULT MEXICAN PATIENTS

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OBJECTIVE: Epilepsy represents a national health problem. In Mexico there are between 1.2 and 2.2 million diagnosed patients who raise the demand for health care services. The aim of this study was to analyze which antiepileptic drug is a cost-effective therapy as an adjuvant treatment for the management of refractory partial seizures using a health care payer's perspective. **METHODS:** A three-stage Markov model was used with a follow-up period of one-year (4 cycles). Effectiveness measures were the percentage of patients under control (no seizures) and the number of hospitalizations avoided. The transition probabilities were obtained from national and international published literature. Comparators used in the assessment were topiramate (300–800 mg/day), levetiracetam (2000–3000 mg/day), gabapentin (1200–1800 mg/day), lamotrigine (75–400 mg/day), vigabatrin (1000–3000 mg/day) and pregabalin (150–600 mg/day). Estimation of resource use was performed employing hospital records from hospitals of the Social Security Mexican Institute (IMSS). They include days of hospitalization, emergency, outpatient services and drugs costs. The model was calibrated and probabilistic sensitivity analyses were conducted using bootstrapping techniques. **RESULTS:** The highest rate of controlled-patients was for pregabalin (54.1%;CI95% 53.3%–55.1%) followed by topiramate (42.2%;CI95%41.5%–43.1%); levetiracetam (34.1%;CI95% 33.4%–34.8%); vigabatrin (32.6%;CI95% 32.0%–33.4%); gabapentin (27.4%;CI95% 26.9%–28.1%) and lamotrigine (24.7%;CI95% 24.1%–25.3%). The annual expected mean cost per patient resulted in US$3136.4 (CI95% US$3076.2–US$3139.8) for pregabalin; US$4295.9 (CI95% US$4269.8–US$4318.3) for topiramate; US$4037.7 (CI95% US$4015.6–US$4059.8) for levetiracetam; US$3470.9 (CI95% US$3450.1–US$3493.3) for vigabatrin; US$3581.6 (CI95% US$3,552.3–US$3615.8) for gabapentin; and US$2807.2 (CI95% US$2789.1–US$2825.4) for lamotrigine. The ICER's of the alternatives choosing gabapentin as the gold standard were –US$1,769 (CI95%, –US$1,685.3–US$1,812.8) for pregabalin, US$4,826.5 (CI95% US$4,143.7–US$4,895.8) for topiramate; US$6,807.9 (CI95% US$5,821.4–US$6986.7) for levetiracetam; –US$2,127.9 (CI95% –US$2,381.8,–US$1,561.2) for vigabatrin and US$28,681.6 (CI95% US$28,569.1–US$49,547.0) for lamotrigine. Acceptability curves and component analyses showed that these results remain robust. **CONCLUSION:** Pregabalin demonstrated to be a cost-saving and cost-effectiveness adjuvant therapy in the management of refractory partial seizures in Mexican patients.

PND13

A COST-EFFECTIVENESS ANALYSIS OF NATALIZUMAB VS. INTERFERON-BETA AND GLATIRAMER ACETATE IN PATIENTS WITH ACTIVE RELAPSING-REMITTING MULTIPLE SCLEROSIS CURRENTLY FAILING ON EXISTING THERAPY

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OBJECTIVE: Natalizumab is a new disease modifying therapy currently licensed for use in patients with relapsing-remitting multiple sclerosis (RRMS), and has recently been the subject of a cost-effectiveness evaluation by the National Institute for Health and Clinical Excellence (NICE) in the UK. NICE accepted that natalizumab was cost-effective in a highly-active subgroup of RRMS patients, but not in all patients failing on current therapy (sub-optimal therapy, SOT patients). In the SOT patients, the basecase ICERs exceeded £43,400 and NICE essentially concluded that natalizumab would not be a cost-effective use of NHS resources in these patients unless they were having two or more relapses per year. However, NICE recognised that the evaluation may have underestimated the incremental QALY in two areas. The first was that the relapse disutility was underestimated, and the second was that the time horizon of the evaluation was too short. Here we re-evaluated the ICERs for natalizumab vs. interferon-beta and glatiramer acetate in SOT patients taking into account the points raised by NICE. **METHODS:** The original model submitted to NICE was a 20-year markov-model parameterised for the UK from a direct health care perspective. Disutilities for relapse were updated using values from a previous UK Health Technology Assessment, and the cost of relapse was changed in line with contemporary studies. The time-horizon for the model was extended from 20 years to 30 years. **RESULTS:** The ICER from a direct medical costs perspective for natalizumab vs. interferon-beta was £29,900 per QALY. For natalizumab vs. glatiramer acetate the ICER was £29,300 per QALY. **CONCLUSION:** The European Medicines Evaluation Agency has approved natalizumab for use in highly active RRMS, including SOT patients. Given the willingness-to-pay threshold of £30,000 per QALY commonly associated with NICE guidance, the results here show that natalizumab is a cost-effective treatment for all patients failing on current therapy in the UK.

PND14

ECONOMIC EVALUATION OF SATIVEX® FOR TREATMENT OF NEUROPATHIC PAIN IN PATIENTS WITH MULTIPLE SCLEROSIS

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OBJECTIVE: To determine the incremental cost-utility ratio (ICUR) of Sativex®, a novel, cannabis-based therapy, as adjunctive treatment for neuropathic pain in MS adults from a Canadian provincial government payer perspective over a one-year time horizon. **METHODS:** Efficacy and safety of Sativex® were extracted from the pivotal phase III trial comparing Sativex®+standard analgesic care (SAC) to SAC alone. Direct medical resources (medication, health professionals, lab and diagnostic) were taken from a burden of illness study. Sativex® utilization for the economic analysis was based on the utilization in the pivotal study (# sprays per day). Costs (2006 CND$) were based on provincial sources. Utilities were based on a mapping exercise whereby pain severity (BS-11) from the pivotal trial was mapped onto Health Utilities Index Mark 3 (HUI) pain attribute